BETTER FARMING METHODS

Specialized Magazine for Agricultural CHANGE-AGENTS

JUNE 1961
A WATT PUBLICATION
★★★

WHAT ARE MARKETING ORDERS?

The family farm – can it survive?

TO OWN OR HIRE MACHINERY!

FOREIGN TRADE

UNIVERSITY MICROFILMS
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ANN ARBOR MICH

"My New Building was Easy... And It'll Grow With My Needs....."

Extension agent Palmer Torvend, left, recommended a West Coast Lumber panelized utility building to berry grower David Saucy, Jr. Saucy bought the panels from his lumber dealer and erected the building, with his neighbors' aid, within a day.

...David Saucy, Jr., Oregon berry producer points out

Dave Saucy saw results in a hurry when his county agent recommended West Coast Lumber's panelized farm building construction...and Saucy's new utility building will always fit his needs...simply by adding new panels.

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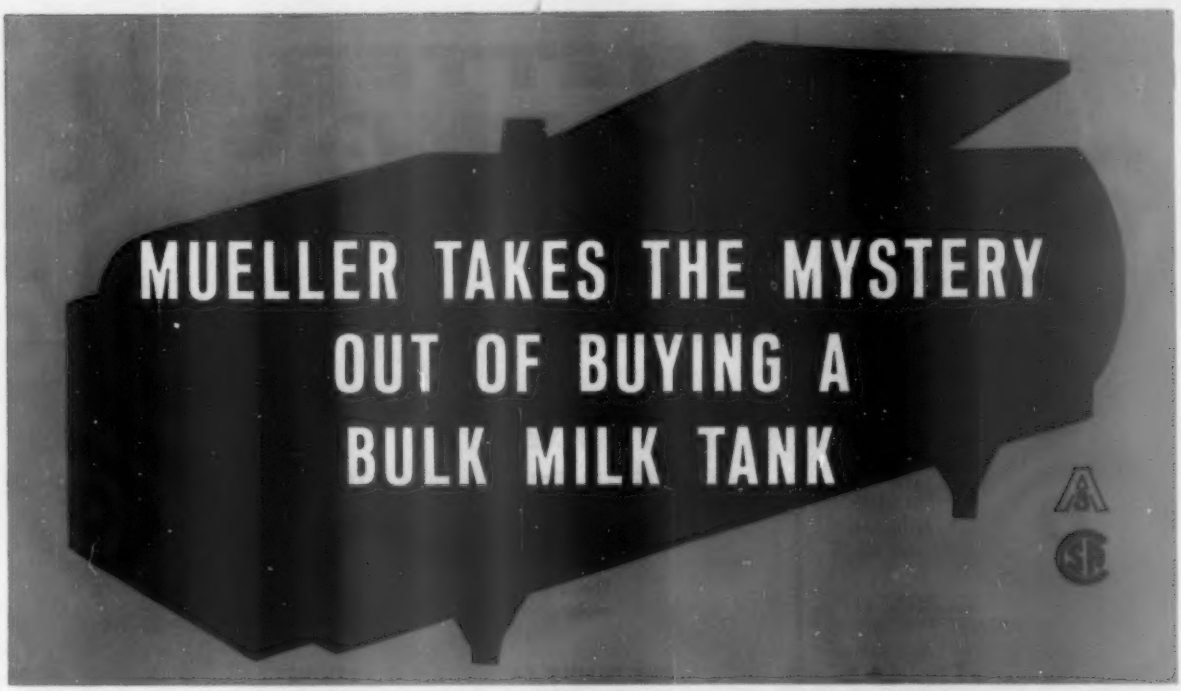

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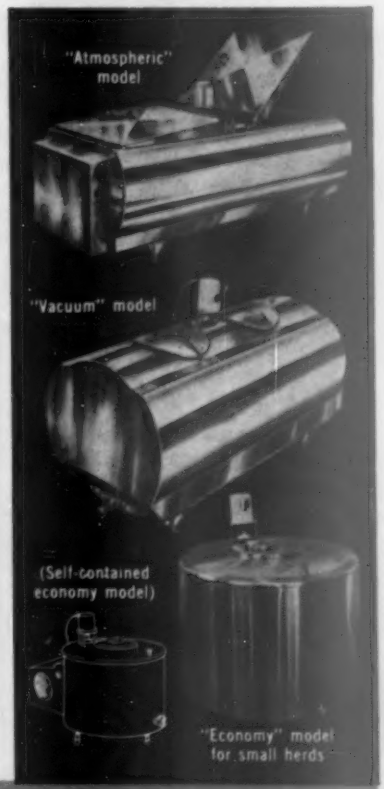

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Then call your MUELLER dealer!

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BETTER FARMING METHODS

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features

FARM MACHINERY: SHOULD YOU OWN IT OR HIRE IT? ..... p. 8

Equipment rentals in the Salinas Valley of California have progressed the last 15 years until nearly every rancher leases row crop harvesting and transporting equipment. These farmers tell why they prefer leasing or renting to owning.

THE FAMILY FARM: CAN IT SURVIVE? ..... p. 20

One of the greatest threats is the availability of operating and expansion capital. Many individual farmers may soon find their financial needs to be greater than they can meet with conventional credit sources. It is suggested that maybe a corporate type structure will enable farmers to better meet their future capital needs.

THE U. S. FARMER'S STAKE IN FOREIGN TRADE ..... p. 26

Today we produce more of some products than we can use at home or sell abroad for dollars. Many believe that it would be better for the U. S. to make these surpluses available to less fortunate nations and thus speed up development in poorer countries.

WHAT ARE MARKETING ORDERS? ..... p. 32

Ten important points do an excellent job of telling exactly what marketing orders are and what they can do for agriculture.

departments

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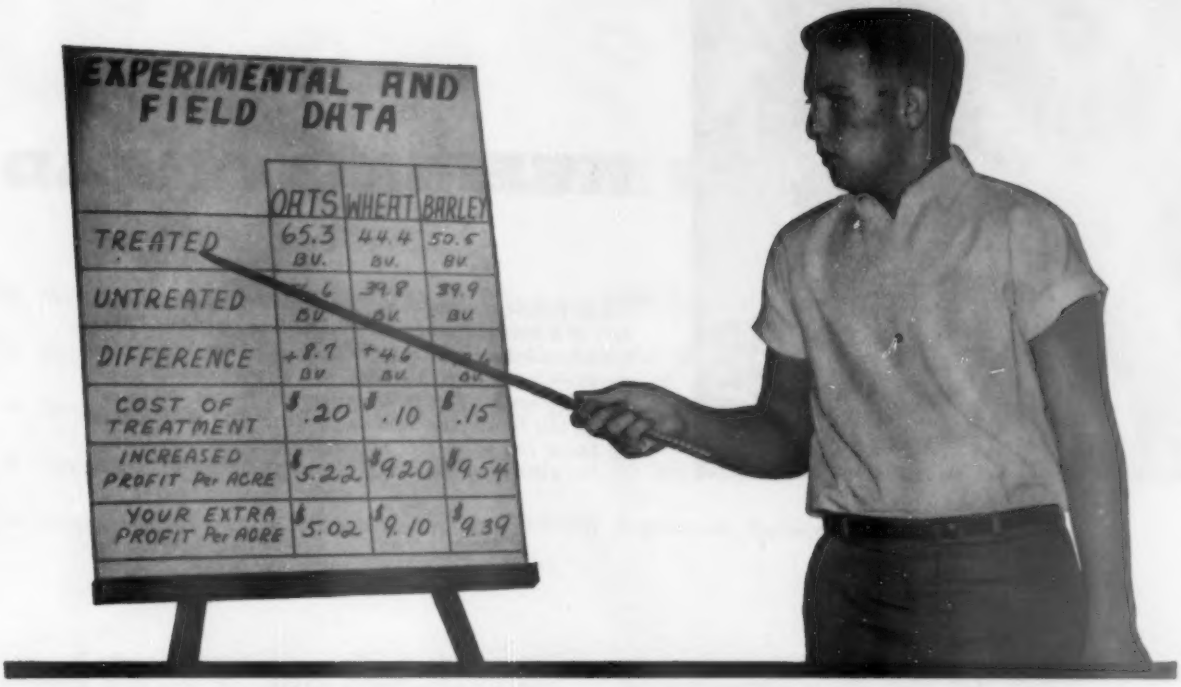

Increase farm income $25,000 to $300,000 per county with seed treatment

"Best way I know to put $25,000 of extra spending money into my home county would be to treat all the small grain seed with a good seed treatment," says Danny Lamb, Swainsboro, Ga., winner of the 1960 Georgia Crop Improvement Project Award.

Danny's work shows that income from oats can be increased by $5 per acre with seed treatment . . . wheat by $9.10 . . . and barley by almost $9.40. This figures out to well over $25,000 for the small grain acreage in his home county.

Counties with larger acreages in small grains, cotton, sorghum, flax, and peanuts can reap still bigger benefits . . . as high as $300,000 per county for the high-producing grain counties of the Great Plains.

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You can help increase farm income in your county by telling more farmers about the benefits of seed treatment. Morton Chemical Company, makers of Panogen seed fungicide, Drinox seed insecticide, and Pandrinox dual-purpose treatment will help. They'll provide booklets, films, and other helpful materials. Use the coupon below to request information.

Don't let farmers in your county miss out on the extra crop yields and bonus income that seed treatment can bring. Tell them the seed treatment story hard and often!

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Send me full information on materials available to promote seed treatment with farmers in my area.

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TITLE_____ STUDENT ☐

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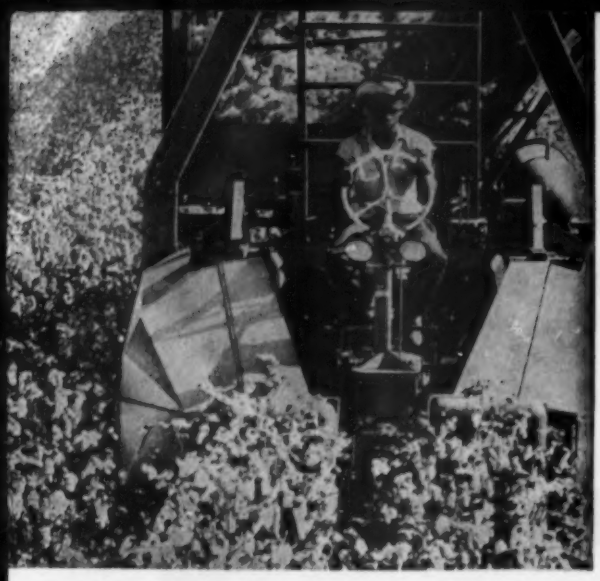


KEEPING AHEAD

This picture of a two-row cotton picker really helps tell the story of a dynamic technology in American agriculture. Made by Allis Chalmers Manufacturing Co., it has two picking speeds — 2 or 2¾ mph — and with a conversion kit can be changed from a picker to a conventional tractor. When converted, this tractor can be used for extra field work without the added cost of another tractor.

Farmers Favor Complete Ground Rations

A survey of hog-feeding operations on 299 Illinois farms shows that considerably more than half of the farmers are using complete ground rations.

Of the farmers interviewed, nearly 28 percent said they used complete ground rations fed free choice during the entire growing and finishing period. Another 30 percent said they used a complete ground ration for part of the period and shelled corn and supplement fed free choice for part of the time. A few more than 12 percent said they fed ear corn and supplement during the growing and finishing period, while 18 percent fed shelled corn and supplement. The remaining farmers used other feeding combinations.

Antibiotic May Conserve Rumen Energy

Increased growth response from antibiotics fed to calves may result from energy conservation in the rumen.

Dairy scientists at the Ohio Agricultural Experiment Station have found that an antibiotic added to the ration of young animals affected the rumen microorganisms.

This basic research showed that in calves much of the decline in blood sugar or glucose, a body energy source, during the early weeks was the result of rapid reduction in the corpuscle or red blood cell glucose concentration.

When it was found that calves fed the antibiotic maintained a higher blood glucose level, it was theorized that the antibiotic increased calf growth through conservation of energy resulting from restrained rumen fermentation associated with differences observed in the rumen microorganisms of the experimental compared to control calves.

Why Boys Stay On the Farm

Why do some farm sons continue in farming while others leave? This question was posed in a recent study by rural educators at the University of Wisconsin.

The boys who stayed in farming frequently had different backgrounds than the students who took non-farm jobs, went to college, or joined the armed forces.

Boys with parents engaged in full-time farming were more likely to stay in farming than were sons of part-time farmers. If the parents owned the farm or had been farming for more than 25 years, the sons were more likely to stay. Boys who had invested money in a farm were more likely to remain on the farm.

Environment Influences Milk Production

What effect does breed, season of calving, gestation, dry period, and body weight have upon milk and fat production in dairy cattle? Research at the University of Georgia has given some practical answers.

Generally, dairymen should breed for cows of larger than average size to get higher than average production within a breed. If nutrition is a problem, then cows calving in the winter will produce more milk than cows calving in any of the other three seasons. Management seems to have more effect on production than does breeding. Whatever breed you own, production can be increased by improved feeding and management.

Pigs Do Better on Steel Mesh

University of Illinois swine research shows that pigs on steel mesh made 19.5 percent faster gains than pigs on concrete floors.

The series of 14 tests involved 728 pigs weaned at two to three weeks of age. All pigs, regardless of flooring, received the same rations and experimental treatment.

Feed required per pound of gain varied, and neither type of flooring affected it consistently.

Pigs on the steel-mesh floor showed no adverse effects from being on the mesh. Their feet and legs, in particular, showed no harmful effect. Pigs on steel mesh also stayed much cleaner than those on concrete.

Rural Areas Development Board Set Up

Secretary Freeman has established a Rural Areas Development Board consisting of representatives of 11 Departmental agencies. The chairman is John A. Baker, Director of Agricultural Credit Services. The purpose of the Board is to give maximum assistance to State and local groups in a broad program of rural area development. The

IN AGRICULTURE

- **Management Seems to Have More Effect on Milk Production than Breeding**
- **USDA Scientists Report a New Testing Method for Detecting Bovine Brucellosis**
- **Grass Silage Proves to be More Efficient Than Hay for Dairy Cows**
- **Complete Ground Rations Favored in Study of Illinois Hay Farms**
- **Proper Fertilizing Will Maintain Good Alfalfa Stands on Rolling Hills**

Secretary stressed, however, that while the newly named group will initiate and coordinate the supporting programs of the Department, State and local leaders will be primarily responsible for initiating and carrying forward area programs and individual development projects to stimulate economic growth in rural areas.

New Brucellosis Detection Method

USDA scientists now report that they have developed a promising new method, called the Heat Inactivation Test, for detecting bovine brucellosis. Widespread use of the test under field conditions will be necessary before final evaluation can be made. Research so far indicates that its primary value will be to supplement the standard tube and plate agglutination tests by clarifying the brucellosis status of cattle in problem herds. More information is available on this for the asking.

Fertilizer Keeps Durable Alfalfa Stands

Research at the University of Minnesota shows that proper fertilizing will maintain good alfalfa stands on rolling hills for 8 or 9 years. In test plots at the University, alfalfa stands established in 1951 are still producing up to three and four tons of forage per acre, and the best yields are from plots getting plenty of potash and phosphorus. The Minnesota researchers also found that annual top-dressing is better than putting fertilizer on every other year. Where 300 pounds of 0-20-20 were applied the year before seeding and followed up with annual topdressing, alfalfa went 3.5 tons with top-dressing along.

Molasses No Help in Swine Rations

University of Illinois tests reveal that blackstrap molasses added to fortified corn-soybean meal rations did not improve the performance of growing-finishing pigs.

This test compared three groups of pigs fed a fortified corn-soybean meal ration. One group served as the control. The second had 25 percent of molasses added to their ration, while the third group had 5 percent of molasses in their ration.

No evidence was found that either level of molasses improved the pigs' performance. On the other hand, the pigs receiving molasses required more feed per pound of gain than pigs on the control ration.

Progress on Face Fly Research

Year-round research to find ways to control the face-fly — a pest that is rapidly becoming a serious menace to livestock in this country — has been made possible by development of a laboratory method of rearing these flies.

John H. Fales and his co-workers of the Agricultural Research Service, U. S. Department of Agriculture, have succeeded in propagating the insects through eight generations in an effort to build a colony large enough to permit experiments aimed at development of suitable control measures.

Bigger Farms Cut Machine Costs

It takes less labor and machinery to operate one big consolidated farm than to farm the same number of acres as smaller individual farms, according to Iowa State University research.

A study of consolidations of 214 farms in southern Iowa indicated that the farmer who remained on the farm and took over his neighbor's farms replaced less than a third of the labor that had been used by the farmers he succeeded.

The amount of machinery investment per man-year, however, leaped from $3,744 before consolidation to $5,960 after consolidation. This shows that the farmer substituted capital and machinery for the labor, but used more of the capital for fertilizer and related resources than for machinery.

Silage — From the Cow's Viewpoint

From a cow's viewpoint, grass silage is excellent as a complete forage ration.

In long-time Cornell experiments, grass silage proved more efficient than hay in milk production. The research showed 100 pounds of milk could be produced with five pounds less digestible nutrients when grass silage was the source of nutrients instead of hay. The cows actually consumed slightly less forage dry matter on silage, but produced more milk than from a hay ration.

FARM MACHINERY: SHOULD YOU OWN IT OR HIRE IT?

by F. Leland Elam

(ABOVE) Leasing of sprinkler irrigation equipment is a big thing in Monterey county, even to the large booster pumps for moving the water out into the aluminum pipe lines with sufficient force to cause the sprinklers to work. Monterey County Farm Advisor Harry Agamalian is shown in photo.

(LEFT) Many hundreds of trailers are leased by farmers in the Salinas Valley of Monterey county to be pulled through the fields of vegetables and have the harvest made directly into them. Then they are pulled by leased trucks to the shipping points. This trailer is in use on one of the ranches operated by Bruce Church, Inc., of Salinas.

● FARM MACHINERY — should you own it or hire it? In the Salinas Valley of California farmers have found that under certain circumstances it is more desirable to lease farm equipment than to own it, to grow and harvest their 92 million dollar vegetable and field crops.

This is not a new practice to the row crop farmers of this rich valley that is principally within Monterey county. Rentals or leasing has, through the last 15 years, progressed until today nearly every rancher leases row crop harvesting and transporting equipment, many lease complete sprinkler irrigation systems, and others do some renting of tractors and other tillage equipment as the need arises for an extra unit to speed up work.

These rental services, while each is distinctively different, are of considerable advantage to any farmer. Of prime importance is the fact that they eliminate the need for sinking large sums of money in new equipment which would be used only a short time, as well as costs for insurance, upkeep and replacement. Rentals are expense and are tax deductible, as compared with a depreciation schedule if purchased.

There seems to be very little in the way of problems for the farmer. About the only one he has is the hiring of adequate help for operating the leased equipment and he would have that one if he owned it.

"There is never any problem of getting equipment when each need it," reports Farm Advisor Harry Agamalian of Monterey county. "They tell us the leasing services have enough to take care of everyone, for from long experience they know just what is expected each season."

In the Salinas Valley lettuce is the principal crop. Among many others are cauliflower, tomatoes, onions, carrots, broccoli, cabbage, celery, melons, corn and artichokes.

To handle these and prepare them for market there are many large processing and shipping firms. Both they and individual ranchers operate the

(*Continued on page 34*)

WASHINGTON NEWS

by Jay Richter

The latest information from Washington indicates that the Kennedy administration's omnibus farm bill is in real trouble and will probably not have enough backers to pass in its original form.

Redevelopment Act Passes

The administration's new Area Redevelopment Act puts a heavy premium on local leadership and initiative.

Rural areas which benefit most from this brand new program will be those which take the lead in working out acceptable development "master plans."

The Redevelopment Act, approved recently by the Congress, provides $394 million in Federal loans and grants to rebuild the economies of depressed rural and urban areas. Nearly half the money will probably be available for rural areas.

Don't confuse this program with USDA's continuing Rural Areas Development Program. Some of the counties and areas participating in the USDA-led self-help effort will also qualify for aid under the new loan-and-grant act. Some won't. USDA plans to continue its program and expand it to offer educational, leadership, and technical aid to any county or group of counties which wants to launch its own development campaign.

Here's what will be available to low-income rural areas under the new Redevelopment Act:

1. $100 million in loans running up to 25 years with interest rates about 4 per cent to help build private industrial and commercial projects. But note this: Before any area can get such a loan or practically any other aid under the new program, it must be approved by a State Development Department or similar agency as fitting into a total area development plan. So, a comprehensive area plan must be the first step for local leadership in taking advantage of the new Federal aid.

2. Loans and grants for public facilities needed in bringing new jobs into an area, such as water and sewage systems; technical aid for program planning and resource surveys; retraining grants to prepare people for jobs in business and industry. About $194 million is available for both urban and rural areas in these programs, and rural areas may get about half the funds.

Rural areas eligible to apply for aid under the program will be, in general, those with the lowest income levels. USDA was working on a list of eligible areas at presstime.

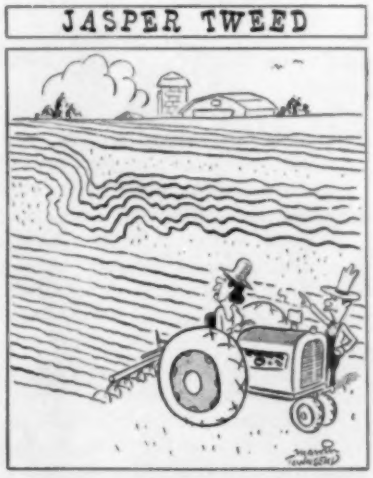
Omnibus Bill In Trouble

The Kennedy administration's ambitious omnibus farm bill was mired in deep trouble at presstime.

Agriculture Secretary Orville Freeman talked hopefully in public. But his aides scouting the situation on Capitol Hill found, as other observers did, that chances of holding enough Democrats in line to pass the administration bill in its original form were dim.

With Republicans solidly against the plan to give the Congress only veto power over new commodity programs drafted by USDA and farmer committees, it required only a relatively small number of Democratic defections to put the bill in danger. And Southern Democrats, under heavy pressure from the Farm Bureau and other organizations which feared the bill would be used to develop livestock and poultry controls, began saying the bill was far too broad.

Best prospect now: Legislation to continue the feed grain program another year, and to cut 1962 wheat acreage. The omnibus bill may be scaled down and amended to leave the Congress most of its traditional authority—if not all of it—over new farm proposals.



"Oh, Dear! That must be where I put on fresh lipstick."

Bigger Role For Extension

USDA's new Extension Administrator is pointing toward a bigger Extension role in marketing and farm product utilization.

Marketing services make up the biggest segment of our agricultural industry today, says Administrator E. T. York, Jr. More than 10 million workers are involved, adding about $60 billion a year to the value of raw farm products.

Possibilities for reducing the farm-consumer price spread through greater efficiency are great, says York. And while Extension should

(*Continued on page* 13)

You are using more Trace Elements than ever!

CHECK YOURSELF ON THE FOLLOWING QUESTION . . .

ARE YOU UP TO DATE ON FERTILIZER?

Check yourself on the following question. Don't be surprised if you miss. Fertilizers are a rapidly changing part of this business of farming.

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Is there an indefinite supply of trace elements in the soil? Doesn't this mean that although you may not have a trace element deficiency visible this year, with increasing yields, it is only a matter of time until problems will develop?

In the meantime, Smith-Douglass is adding trace elements to S-D premium grades of fertilizer. They are added in the form of TREL, an exclusive formula of all the trace elements known necessary for plant growth.

Expensive? Not at all. Your investment in TREL is a few cents an acre.

Have you ever wondered what the limiting factor was in that rare year when everything seemed to be just right—weather included? It might have been a trace element deficiency. Why take the chance? Use Smith-Douglass Fertilizer with TREL every year.

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WASHINGTON NEWS

(Continued from page 10)

continue to help commercial farmers increase efficiency, he adds, it also has many opportunities to improve marketing efficiency.

Favoritism For Farm Research?

Complaints that the government is giving farmers favored treatment when it finances agricultural research are a long way from the truth.

The fact is, according to USDA research chief, Dr. Byron Shaw, that the Federal government puts more into research for industry than the Federal and State governments combined spend on research for agriculture—the nation's largest industry.

A 1959 survey showed that Federal funds paid for 57 per cent, or $5.4 billion, of total industrial research in that year. In the current fiscal year, by way of comparison, all agricultural research cost a total of $541 million. Out of that total, the Federal government financed only 27 per cent while the states paid for another 21 per cent.

Research Laboratory Expansion

USDA plans to have its big new National Animal Disease Laboratory at Ames, Ia., in full operation by July 1.

Department officials also plan to begin operations, though not on a full scale, later this year in a new boll-weevil research lab at State College, Miss., and laboratories for studying insect pests of corn and small grains at Tifton, Ga., and Brookings, S.D.

Also coming up on the research front: Plans for studies of a new dry-milling process under which hard wheat can be separated into high-starch and high-protein products.

Corn Acreage to Be Cut 20%

Farmer response to the administration's 1961 feed grain program was so good in the early stages that officials were confidently predicting they'd get corn acreage down about 20 per cent from the 1959-60 average.

Reports by early May indicated that with a full month of sign-up still ahead in some areas, farmers had contracted to take about 7.5 million acres of corn and grain sorghum out of production. In return for idling these acres, the growers already under contract at that point stood to get about $200 million worth of grain certificates plus eligibility for price supports.

If administration hopes are realized, the program may cut the feed grain surplus or at worst prevent any further buildup. USDA would also be able to move enough of its corn into the market, in redemption of the payment certificates, to keep market prices next fall low for non-compliers.

New On-The-Spot Survey Methods

USDA Crop Reporting Service is beginning the use of new on-the-spot survey methods to improve the reliability of its crop production forecasts.

The surveys, developed by Department research, will supplement the reports the Service gets from its dedicated nationwide team of volunteer farmer crop reporters. The surveys will be made this year only on cotton and corn. End

Change of Address for Western Office

While Palo Alto, Calif., has been the official address of Pacific Poultryman since 1947, when the magazine was acquired by Watt Publishing Co., the new address on and after June 28 will be Pacific Poultryman, P. O. Box 950, Redlands, Calif.

Although never listed in the magazine, the editorial work of the magazine has been handled from Redlands by Roland C. Hartman for the past 13 years. Only the advertising office, headed by H. K. Marcott, was located in Palo Alto.

In addition to being the headquarters for Pacific Poultryman, Redlands will also become the Western office for all Watt Publications. These include Poultry Tribune, Poultry Processing and Marketing, Turkey World, Feed and Farm Supplier, Broiler Business, Better Farming Methods, and Industria Avicola.

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Dependable Farm Equipment Since 1886

NEW BLUE BOY HIGH CLEARANCE TRACTOR

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FARM TRENDS

A quick summary of developments in agriculture

FARM PROPERTY TAXES are reported to have risen faster since 1947-49 than almost any other farm cost item. Total real estate and property taxes paid by farmers in 1960 are expected to total $1,548 million, $103 million more than the previous year.

FEED GRAIN SIGN-UP REPORTS show that 555,623 farms will divert 12,225,417 acres from corn and grain sorghum production this year under the 1961 feed grain program. These figures reflected the sign-up through May 5.

FARM REAL ESTATE PRICES in the U. S. leveled off during 1960 after having continually trended upward, with the exception of two brief periods, for the past 20 years.

BEEF BREEDING CATTLE EXPORTS during 1960 were down 20 percent from the preceding year. A total of 12,919 head were exported—down 3,282 from 1959.

SPRING FARROWING MAY BE UP 8 percent (December through May) according to recent figures from the Crop Reporting Board. The current Pig Crop Report indicates a June through August farrowing increase of 5 percent over the 2,271,000 sows that farrowed during the same months of 1960.

FARMERS RECEIVED LOWER PRICES in 1960 for the foods they produced than they got in 1947, but consumers paid substantially more, according to a recent USDA research report. However, even though food prices are higher a consumer in 1960 could buy a larger amount of food than in 1947-49. This is because personal incomes have risen faster than food prices.

FARM BUSINESS CONDITIONS

Farm income up

Employment up

Parity ratio down

Marketings down

Farm Deposits down

ITEMS	Mar. 1961	Feb. 1961	Mar. 1960
PRICES:			
Received by farmers (1947-49 = 100)	90	90	89
Paid by farmers (1947-49 = 100)	121	121	120
Parity price ratio (1910-14 = 100)	80	81	80
Wholesale, all commodities (1947-49 = 100)	120	120	120
Paid by consumers (1947-49 = 100)	128	128	126
LABOR:			
Farm labor, U.S. (dol. per week without board)	—	46.75a	46.25a
Factory labor, U.S. (dol. earned per week)	90.71	89.86	90.91
PRODUCTION:			
Industrial, physical volume (1947-49 = 100)	155	153	166
Farm marketings, physical volume (1947-49 = 100)	103	104	98
INCOME PAYMENTS:			
Total personal income, U.S. (annual rate, bil. of dol.)	410	406	397
Cash farm income, U.S.[1] (annual rate, bil. of dol.)	—	36	33
EMPLOYMENT:			
Farm (millions)	5.0	4.8	4.6
Nonagricultural (millions)	60.5	59.5	59.7
FINANCIAL (District member banks):			
Demand deposits:			
Agricultural banks (1955 monthly avg. = 100)	99.8	102.5	99.6
Nonagricultural banks (1955 monthly avg. = 100)	97.0	103.0	96.8
Time deposits:			
Agricultural banks (1955 monthly avg. = 100)	140.1	139.8	130.5
Nonagricultural banks (1955 monthly avg. = 100)	141.8	141.2	127.1

[1]Based on estimated monthly income.
[a]January

Compiled by the Research Department, Federal Reserve Bank of Chicago

THE MAY 1 winter wheat forecast is 1,096 million bushels, down 2 percent from last year, 30 percent above average, but about the same as the forecast of a month ago. The indicated yield, at 26.5 bushels per harvested acre, is 1 bushel less than last year, 5.6 bushels above average, and the third highest of record.

APRIL FARM EMPLOYMENT survey during the week of April 23 shows that 6.9 million persons were at work on farms, down 4 percent from a year earlier, and the smallest of record for April. This was partly due to the fact that April this year was a cold or wet month in most areas. Of the total employed on farms during the survey week, 5.3 million were farm operators and other family workers, and 1.6 million were hired workers, both down 4 percent from April 1959.

1960 COTTON PRODUCTION figures released May 8 by the Crop Reporting Board show 14,272,000 bales of cotton were produced in 1960, down 2 percent from 1959, but 4 percent above the 1949-58 average of 13,710,000 bales.

MORE STEERS and heifers marketed during April of this year. A total of 482,123 head of steers and heifers were marketed out of first hands for slaughter at 12 livestock markets. This is an increase of 11 percent over the 353,824 head marketed in April 1960.

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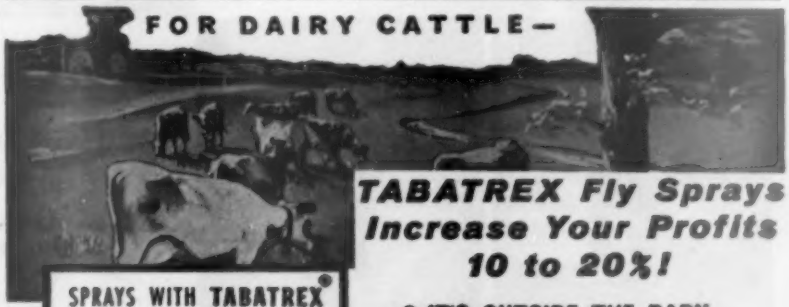

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Each Interphone station has a compact "speaker-microphone" that is interconnected with all other stations. This enables you to talk back and forth between these locations just as you would in ordinary conversation. If you wish, you can even converse "hands free" by speaking *toward* the speaker-microphone from several feet away.

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Hough Succeeds Waddle as BFM Editor

On July 1, John W. Hough assumes the editorship of Better Farming Methods.

He succeeds Frank Waddle who is moving to Washington, D. C., to become managing director of Bailey, Richter and Klinger, Inc., counsel in agricultural relations.

Fortunately, Jack Hough will need to move just across the hall to take over his new job. He has been with Watt Publishing Co. for the last three years as editor of Turkey World.

He has an excellent background of training and experience to succeed Waddle in editing this magazine for those who are agricultural leaders — on the farm and in the office.

He is a graduate of the University of Vermont, later receiving a Master of Science degree in agricultural economics from Cornell University. Hough served as an instructor at New York Agriculture and Technical Institute, Delhi, N. Y.; superintendent of the research farm and field man for the Wirthmore Feed Company, and then as extension specialist at the University of Massachusetts.

As the editor of Turkey World, Hough has been serving a segment of agriculture which has undergone as much of the "adjustment" described in Better Farming Methods as has any segment of agriculture. He has a deep and abiding interest in the farm management and adjustment problems of farmers. We feel sure his background in agricultural economics, plus his natural enthusiasm, will make a strong contribution to the editorial strength of Better Farming Methods.

Hough

Waddle

Our best wishes go with Waddle and his family as they move on to new opportunity. Frank has justly received the plaudits of farmers and agricultural leaders for his perceptive and fair editing of Better Farming Methods during its development of an editorial concept which has made it one of the most unique and challenging magazines in agriculture. — J. H. Florea

NEW BOOKS

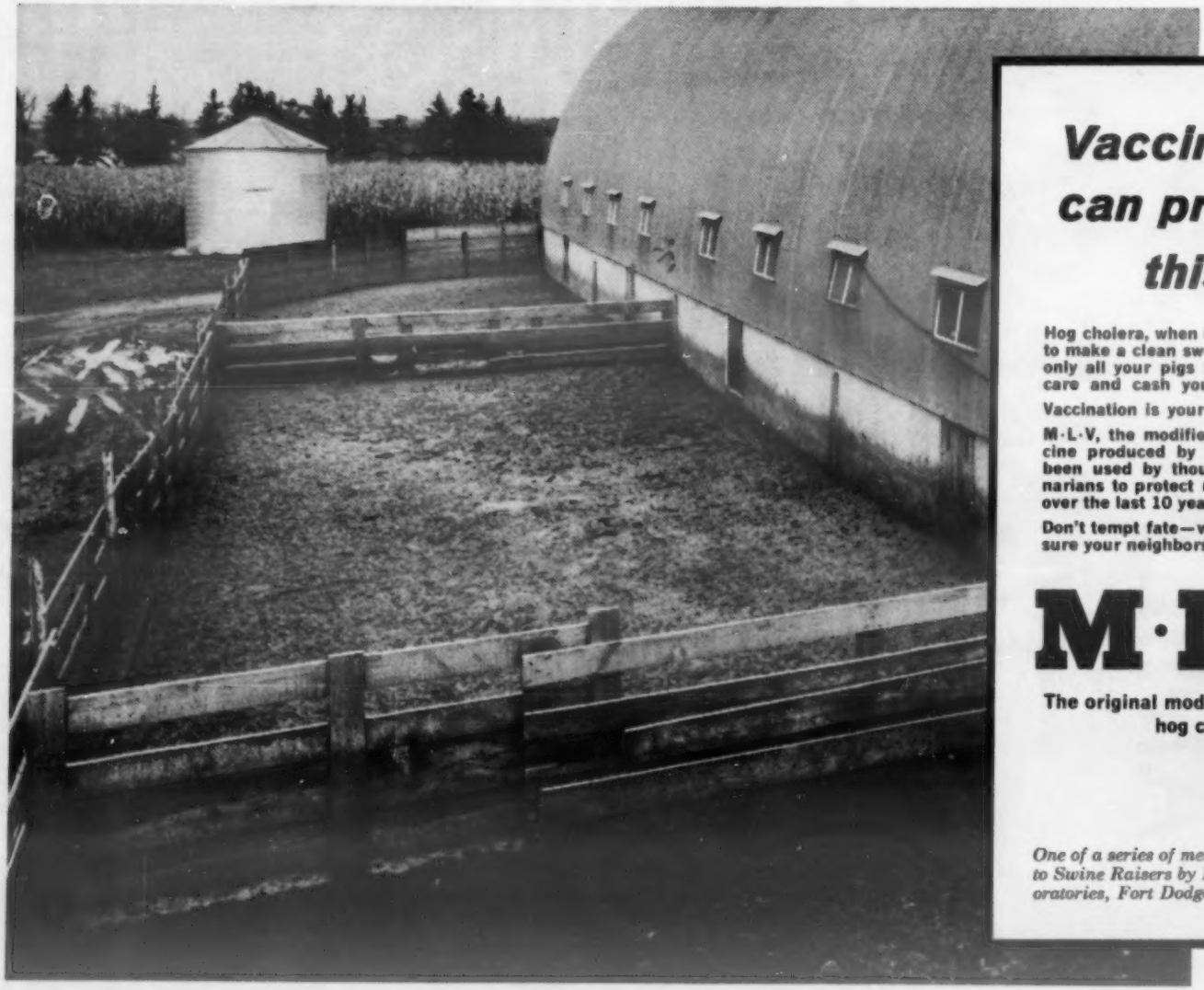
THE FARM MANAGEMENT HANDBOOK, published by The Interstate Printers and Publishers, 19-27 North Jackson Street, Danville, Illinois.

AUTHORS: I. F. Hall and W. P. Mortenson, College of Agriculture, University of Wisconsin. DATA: Third edition, cloth bound, 425 pages. PRICE $6.00.

Farming today is a highly competitive business and cannot be successful on a hit-or-miss basis. It has to be approached scientifically, with knowledge and understanding of the factors which determine success or failure.

The prior editions of this book were widely used in vocational agriculture classes throughout the nation because of its dual nature of being both a textbook and a handbook. As a textbook, the teacher will like the special features that make it the most teachable book in its field, from the "Highlights" which introduce each chapter to the "Questions and Answers" at the ends of the chapters.

This is also a farm management handbook — that means you can look in it for answers to your problems. It covers such areas as farm leases, field arrangement, financing the purchase of a farm, government aid to farmers, father-son agreement, and many, many more.



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THE FAMILY FARM: CAN IT

The latest census makes it clear that farms are continuing to grow larger each year. Up to now, farm expansion has been possible because of accumulated earnings during prosperous years. But the coming generation will be faced with the problem of enlarging their operations without this backlog of earnings. Now, credit agencies loan money for expansion with a definite understanding that the money will be repaid in a definite period. Will this arrangement become outmoded as farm expansion continues into the '60's? Is the complete ownership of farms by individual families a vanishing goal? This article by Peter Dorner, Professor of Agricultural Economics, University of Wisconsin, delves into this question. Professor Dorner's original article on this subject appeared on page 811 of the November 1960 issue of the Journal of Farm Economics.

● THERE IS AN old saying that "The only permanent thing in the world is change." Today we are witnessing major changes in all areas of economic life. In farming, technical advances have been occurring so rapidly that we have coined the term "Technological Revolution" to describe them.

With the possibilities created by this technological revolution, farmers are changing the economic structure and organization of agriculture. One of the most dramatic responses of the past decade has been the exodus of people from agriculture. During the 1950's over 700,000 people a year left the farm. Today the farm population is down to approximately 10 percent of the total U. S. population.

At the same time, the number of farms continues to decline while the average size of farm grows even larger. An increasing proportion of farm transfers are for farm combination and enlargement purposes. Nationally, 22 percent of all farm land transfers in 1950 were for farm enlargement. In 1960, this percentage was 45.

Up through the 1930's and even into the 1940's, it was common practice for a farmer to buy an additional farm or two in order to utilize the labor of the children as they grew to maturity. As the boys married, each began to farm one of these farms as an independent operation. This could be done without any loss in efficiency.

But today, these farms remain as one. To redivide them and operate them as independent units would ordinarily result in losses of efficiency and earning capacity. The present generation had the prosperous forties during which to accumulate earnings and grow into this expansion. But the coming generation will be faced with the problem of getting sufficient capital to buy these enlarged units.

The Challenge to the Family Farm

What does all this mean for the future of the family farm? Can it survive these changes?

Our family organized agriculture rests on the assumption that the family will, within its lifetime, acquire ownership of all or at least a large proportion of the resources utilized in the farm business. Credit agencies serving agriculture operate on the same assumption. They supply credit on the very explicit agreement that the credit so extended will be repaid in full with interest in a specified period of time.

Will these arrangements be adequate under the circumstances of rapidly expanding per farm investments with the need to pass these on as going business firms every generation? Is the complete ownership of all resources operated and managed by the family a vanishing goal?

As the process of capital aggregation per farm unit

SURVIVE?

BY PETER DORNER

continues, the value of the resources may become greater than the savings that a family can accumulate in a lifetime. **This is the more likely under existing conditions of shrinking profit margins and a desire and need for increased incomes for family consumption purposes.**

Acquiring sufficient capital to keep up with the technological race is becoming increasingly difficult. A more difficult problem still is that of transferring these large aggregates from one generation to the next under our conventional procedures for financing family farms. Increased use of the land contract is an indication of these difficulties. Father and son operating agreements and partnerships will likely play a larger role in the future. But these may all prove inadequate to the task.

Increase In Contract Farming

Recent increases in contract farming and vertical integration are a reflection, in part at least, of the difficulties experienced in capital acquisition. Under these arrangements, farmers are frequently provided with credit or services of large machines. A number of plans are being developed to centralize at one location the housing, feeding, and milking of cows from several farms. Several of these central milking establishments are already in operation. Under some of these arrangements, the farmers' managerial function is curtailed. The development of new organizational forms in agriculture is increasing.

More Interest in Corporation Farming

In the past several years, there has been a growing interest in the corporate form of organization for farming. In 1958, Congress provided a tax option for certain small corporations whereby they can choose to be taxed as a partnership rather than as a corporation. Although this does not provide a tax advantage over the partnership, it does place the small corporation on a basis of tax equality with the partnership. This may provide an incentive for some farmers to incorporate their farm business.

The corporate form of business organization, as it operates in industry, provides a means for drawing equity or ownership capital from sources far removed from the community in which it operates. Through the device of stock shares, the transfer of ownership is greatly simplified. Stocks are bought and sold, the transfer to new owners takes place, and the corporation carries on its business without interruption. On the basis of this experience in industry, some people have reasoned that the corporate form of organization would be very advantageous to farmers. Has it not demonstrated its ability to meet successfully the dual problems of capital accumulation and transfer which are becoming so troublesome for the family type of organization? Why don't more farmers incorporate?

No Market for Corporate Stocks

The difficulty is that at present there is no organized market for corporate stocks issued against farm property organized in relatively small units. The construction of such a market would permit a small farm corporation to accumulate capital through the sale of stock, and it would greatly simplify the problems of transfer between generations.

There are many problems involved in trying to create such a market. To compensate for the risks and the limited marketability of these stocks, as compared to some industrial stocks and most bonds, investors would probably require a higher dividend return than farmers could pay. They might also demand or obtain more control than the farm family would be willing to give up. Consequently, it seems that the creation of a market for stocks of small farm corporations would have to be in the form of

(*Continued on page* 25)

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CROPS	INSECTS CONTROLLED	DOSAGE*	LAST APPLICATION
Apple and Pear (West of the Rockies)	Codling moth, green apple aphid, pear psylla, orange tortrix, eye-spotted bud moth, California pear-slug, tentiform leaf miners, San Jose, oystershell and Lecanium scales	¾ to 1 lb. active SEVIN per 100 gallons dilute spray Applications in 1st cover have caused thinning: to avoid this delay use until 2nd cover	1 day before harvest Tolerance 10 ppm
Apple and Pear (East of the Rockies)	Codling moth, green apple aphid, white apple leafhopper, apple mealybug	½ lb. active SEVIN in 100 gallons dilute spray	1 day before harvest Tolerance 10 ppm
	Apple maggot, plum curculio, rosy apple aphid, red-banded and fruit tree leaf rollers, Eastern tent caterpillar, pear psylla, periodical cicada, eye-spotted bud moth, European apple sawfly, Japanese beetle, tentiform leaf miners, Forbes, San Jose, oystershell and Lecanium scales	1 lb. active SEVIN in 100 gallons dilute spray Applications in 1st cover may cause thinning: to avoid this delay use until 2nd cover or at least 15 days after petal fall.	
Peach	Oriental fruit moth, peach twig borer, lesser peach tree borer, plum curculio, cat-facing bugs, periodical cicada, Western spotted cucumber beetle, Japanese beetle, Lecanium, San Jose and olive scales	1 lb. active SEVIN per 100 gallons dilute spray (For best scale control, apply when crawlers are present)	1 day before harvest Tolerance 10 ppm
Cherry, Plum Prune	Cherry fruit fly, fruit tree leaf roller, peach twig borer, lesser peach tree borer, black cherry aphid, eye-spotted bud moth, plum curculio, red-banded leaf roller, Japanese beetle, Forbes, San Jose, oystershell and Lecanium scales	1 lb. active SEVIN per 100 gallons dilute spray	1 day before harvest Tolerance 10 ppm
	Codling moth, Eastern tent caterpillar, orange tortrix, Western tussock moth	¾ lb. active SEVIN per 100 gallons dilute spray	
Filbert	Filbert worm, filbert aphid, filbert leaf roller	4 lbs. active SEVIN per acre	No time limit
Grape	Grape leaf folder, grape leafhopper	½ to 1 lb. active SEVIN per 100 gallons	Day of harvest Tolerance 10 ppm
	Grape berry moth, Japanese beetle	1 lb. active SEVIN per 100 gallons	
Strawberry	Meadow spittlebug, leaf roller	1 lb. active SEVIN per 100 gallons	1 day before harvest Tolerance 10 ppm
Non-bearing Citrus	Western tussock moth, orange tortrix, fruit tree leaf roller, citrus cutworm	1 lb. active SEVIN per 100 gallons	Apply only when no fruit is present

CROPS	INSECTS CONTROLLED	DOSAGE*	LAST APPLICATION
Cotton	Thrips, flea beetles, fleahopper, leafworm, striped blister beetle	½ to 1 lb. active SEVIN per acre	No time limit Tolerance 5 ppm on cottonseed
	Boll weevil, bollworm, fall armyworm, leaf perforator, leaf rollers, leafhoppers, tarnished plant bug, light to moderate numbers of Western Lygus bugs (aphids will be repressed by repeat applications in a schedule)	1 to 2 lbs. active SEVIN per acre	
	Pink bollworm	1½ to 2½ lbs. active SEVIN per acre	
	Salt marsh caterpillar, stink bugs	2 lbs. active SEVIN per acre	
	Grasshoppers	½ to 1½ lbs. active SEVIN per acre	
Beans	Mexican bean beetle	½ lb. active SEVIN per acre	Day of harvest Tolerance 10 ppm
	Leafhoppers, bean leaf beetle, cucumber beetles, Western bean cutworm, flea beetles, Japanese beetle	1 lb. active SEVIN per acre	
	Corn earworm, armyworms, velvet bean caterpillar	1 to 1½ lbs. active SEVIN per acre	
	Lima bean pod borer, Lygus and stink bugs	2 lbs. active SEVIN per acre	
Corn	Corn earworm, European corn borer, fall armyworm, sap beetles, Japanese beetle	1 to 2 lbs. active SEVIN per acre	Day of harvest Tolerance 5 ppm (Except—7 days before harvest when forage is fed to livestock Tolerance 25 ppm)
Potato Tomato Eggplant Pepper	Colorado potato beetle, flea beetles, leafhoppers	½ to 1 lb. active SEVIN per acre	Day of harvest Tolerance 10 ppm
	Tomato fruitworm, fall armyworm, tomato hornworm, European corn borer, stink bugs and Lygus bugs	1 to 2 lbs. active SEVIN per acre	
Cucumbers Summer Squash	Pickleworm, melonworm	½ to 1 lb. active SEVIN per acre	Day of harvest Tolerance 10 ppm
	Cucumber beetles, squash bugs, flea beetles	1 lb. active SEVIN per acre	
Ornamentals (see label for the many plants covered)	Bagworm, Japanese beetle, flea beetles, lace bugs, leafhoppers, scale insects, rose aphid and slug, tent caterpillar and many others (See label for full list)	1 lb. active SEVIN per 100 gallons	No time limit
Turf	Chinch bugs, fall armyworm, leafhoppers, sod webworms or lawn moths	1 full measuring cup SEVIN 50W in 15 to 20 gallons water per 500 sq. ft. of lawn	No time limit
Animals: Dogs and cats	Brown dog tick, fleas	5% SEVIN dust—rub in skin and apply in sleeping quarters weekly	Don't treat kittens under 4 weeks old
Tobacco	Hornworms, budworms, flea beetles	1 to 2 lbs. active SEVIN per acre	No time limit
	Budworms—top of row application (Also controls June beetle grubs and flea beetles in plant beds. See label for instructions)	4 to 6 lbs. 10% dust per acre	

*One pound of active SEVIN equals 2 pounds of SEVIN 50W, or 10 pounds of SEVIN 10% dust formulation. SEVIN also comes in microfine sprayable formulations for low-gallonage applications. Read the label and follow directions carefully for best results. Check your state authorities for additional local recommendations.

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McMillen Feed Division
Fort Wayne, Indiana

Can the Family Farm Survive?

Continued from page 21

an extension of the government sponsored farm credit system.

As one possibility, it might be possible to extend the function of the Federal Land Banks. If a farm family chose to incorporate their farm, they could issue stocks representing the market value of their property. These stocks would be identified with the specific farm corporation and could then be sold to the Land Bank. The Bank in turn would sell its own securities on the financial markets. These would not be identified with any specific farm but only with the Bank. The corporation could subsequently repurchase the stock from the Bank, or it could continue indefinitely to pay a specified dividend to the Bank. Existence of such a market would give the farmer or the nonfarm heir the option of investing in or selling his interest in the farm.

Could Provide Protective Measures

Obviously there are a number of protective measures, including an appraisal by the Land Bank, that would need to be provided. Also, this suggestion of modifying the corporate provisions is only one alternative to meeting the difficulties experienced in capital acquisition and transfer. There are other ways in which these problems could be alleviated. But given the present circumstances in agriculture, it may well be that the only way to retain organizational features akin to the family farm is through some modification of procedures for capital acquisition and transfer. Adapting the corporation to meet these needs would seem to be one way of doing this.

The Story in Brief

Changes in the economic organization of agriculture are bound to come. In fact, as we have seen, they are indeed occurring. The question is whether or not present developments will prove most beneficial to farmers and the public at large. We must, I believe, make some modification in the field of farm credit and farm financing. We must think in terms of an agriculture where the operator is not bound to own all the resources under his control. Some alternative to complete family ownership should be provided.

All this does not imply that we should or would move into large corporation farming with corporate giants as we have today in industry. Nor will the present system be changed in a year or two. We must think of this in terms of 25-50 years. What I am saying is that there are very definite indications that the present institutional arrangement of complete ownership of all resources by the operating family is encountering difficulties in trying to meet the dual problems of capital acquisition and transfer. This requires social inventiveness and institutional modification. Whether to construct some alternative to the present arrangement of resource ownership in farming is not the question. The question is how to do it! End.

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THE U. S. FARMER'S STAKE

We are producing more of some products than we can use at home or sell abroad for dollars. Why not use this surplus as a generous gift to needy nations with no strings attached. Contrary to popular belief, this could be done without added drain on the U.S. Treasury

● AMERICAN FARMERS — with the production of one acre in six going to the export market — have a natural interest in foreign trade. Their concern is with the effects of agricultural imports on their businesses and in recent years, with the ability of world markets to absorb their surpluses.

However, until the 1930's, farmers had thought of their problem as one of preventing low-cost foreign products from flooding our markets and depressing prices. Consequently, they favored high tariffs. The principal exception was in the South where cotton and tobacco farmers were advocates of free trade — or at least of very low tariffs. That position was logical for the South. Tariffs couldn't help them and they knew it, but tariffs could make them pay higher prices for nonagricultural products which they bought mostly from the North and from abroad.

The high tariff position of the northern and western farmers was much less logical. They, too, were producers of export crops, notably wheat, pork, tallow, lard, corn, dried and fresh fruits and so on.

On these, as on cotton and tobacco, the imposition of tariffs could do little to raise prices in the United States. The prices paid to American farmers depended mainly on the prices obtainable for the amounts sold abroad. For some few crops and animal products, tariffs did have some price-raising or price-maintaining effect, but these were mostly of minor importance; things of which we produced less than enough for our own use, such as sugar, wool, almonds, walnuts, figs, and dates.

Depression Has Effect

During the great depression of the 1930's, it became more apparent that American agriculture was part of a great network of world trade in which we must buy as well as sell if there was to be a healthy market for our farm and other products. In the meantime, **we had pushed tariffs to higher and higher levels and had led the way in choking off the trade on which our prosperity depended.** It became evident that tariffs alone could not maintain prices in the United States if other countries were in deep depression.

It was as a result of this growing conviction that the United States passed the Trade Agreements Act of 1934 and embarked on a program to lower tariff barriers and trade restrictions throughout the world. That drive was continued in the postwar years on a much larger scale, particularly in the General Agreement on Tariffs and Trade (1947); the Annecy Agreement (1949); and the Torquay Agreement (1950).

These and other actions established a trend toward lower tariffs throughout much of the western world. However, the shortage of dollars for purchase of U. S. products, and the still disorganized industries and agriculture of Western Europe and Japan, made it impossible for those areas to buy vitally needed materials and foodstuffs.

Marshall Plan Launched

It was to overcome that difficulty that the Marshall Plan was launched. It provided foodstuffs, machinery and other supplies and equipment needed in restoring the war-torn countries to productivity, even though they did

IN FOREIGN TRADE

How we can use our surplus to build up the poorer nations without added expense for the taxpayer

by Professor Murray R. Benedict, Department of Agricultural Economics, University of California

not have either dollars or goods with which to pay for them.

The Marshall Plan, together with other loans and gifts, probably prevented an early postwar slump in U. S. agricultural prices similar to that which followed so closely after the close of World War I. They also prevented much suffering and want in Western Europe and Japan and relieved the threat of a communist take-over as a result of the chaotic conditions that would otherwise have existed.

For the most part, the U. S. contribution was an outright gift. But it did accomplish its principal purposes. Europe and Japan recovered rapidly and have continued to gain strength and buying power in the years since. They are now, for the most part, able to buy in normal ways and constitute a very important market for U. S. farm product, though not so large a one as they once were.

Demand Is Key Factor

The experience of the depression and of World War II and the Marshall Plan period brought home to U. S. farmers as never before the fact that **demand, both foreign and domestic, is a key factor affecting economic conditions in their industry.** Whereas in the 1930's, with weak demand, practically no imports and very low exports, they were in the depths of depression; in the 1940's they were able to sell at good prices far larger amounts than those which had kept their markets depressed in the 1930's. Even the producers of the protected minor crops were in general much better off than when they were depending mainly on tariffs to keep their prices from going lower, rather than on strong demand.

Supply Is Important, Too

Nevertheless, the supply side of the trade balance is important, too. Recent years have seen the accumulation of large stocks of storable farm products that cannot be sold in normal ways even in a world that is showing remarkable recovery from the devastation of the war years. This is due mainly to the enormous speed of the technological advance in American agriculture and the difficulty of making quick adjustments in output. Acreages of many of the crops have been cut back severely and millions of workers have left the farms to go into other occupations. Yet the upsurge in productivity has been so rapid that it has more than offset these sizeable adjustments in inputs.

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We are now growing our cotton crop on about a third as many acres as in the middle and late 1920s. We grow almost twice as much corn on a little more than 80 million acres as we formerly grew on 100 to 110 million acres. Our acreage of potatoes has been cut by more than half since the early 1930s; and wheat acreage is down 30 percent from the high level of 1949. All in all, 7.5 million workers are giving us more than twice as much farm output as 12 million did in 1910.

Foreign Trade and Surpluses

This, then, is the heart of the problem of agricultural surpluses. What does foreign trade have to do with

(*Continued on page* 31)

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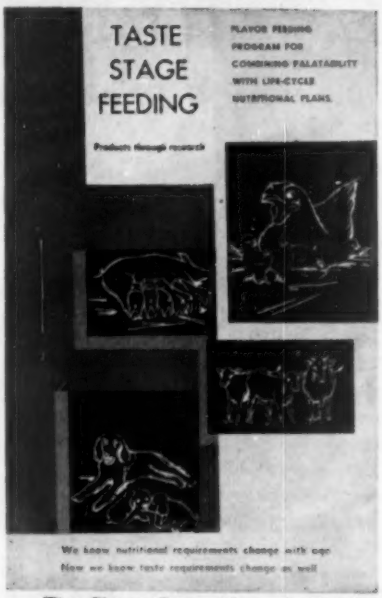

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This booklet contains information on varieties and how certified seed is produced. The Mississippi Seed Improvement Association would like you to have a copy of this free booklet.

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"The Vitamin A Needs of Beef Cattle" is the title of a booklet by Hoffman-LaRoche. Get your free copy by circling the postal card number.

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BANKS MUST BE ALERT TO CREDIT NEEDS

● "BANKS CONTINUE TO BE the most important source of credit for agriculture; but if they are to maintain this leadership, they must be alert to the credit needs of a rapidly changing agriculture and adjust their financing practices to meet the current needs of farmers and related businesses," said Mr. Edgar T. Savidge, secretary of the Agricultural Committee of The American Bankers Association, New York.

He recently spoke at the First Agricultural Credit Conference sponsored by the West Virginia Bankers Association and West Virginia University and discussed ways in which banks can provide a full credit service for agriculture.

"Other lenders in the farm field also have increased their loan volumes, and for some their growth has outstripped that of banking. For example, the rate at which the Production Credit Associations' loan volume has increased during the past few years has been much greater than that experienced by banks."

Need Well-Trained Men

Observing that in order to provide the very best type of service required by our changing agriculture, banks must have staff men with a broad background of training and experience in credit and the credit needs of farmers, Mr. Savidge pointed up the importance of the employment of agriculturally trained men by banks.

"The trend for banks to hire agriculturally trained men is increasing," he said. "This development is one of the best things that has happened in the banking business. Furthermore, these farm-trained men are in an excellent position to analyze management—a key factor in today's farming operations."

Mr. Savidge drew attention to the need for a greater correspondent bank relationship and a strengthening of bank capital positions if banking is to do a completely adequate job in farm lending.

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COMING EVENTS

June 3-8—93rd Annual Meeting of the American Jersey Cattle Club, Corpus Christi, Texas. Contact The American Jersey Cattle Club, 1521 East Broad Street, Columbus 5, Ohio.

June 21-24—Livestock Marketing Congress, Sheraton-Dallas Hotel, Dallas, Texas. Contact Livestock Marketing Congress, 802 VFW Building, Broadway at 34th, Kansas City, Missouri.

July 30-August 2—Sixteenth Annual Meeting of the Soil Conservation Society of America, Purdue University, Lafayette, Indiana. Contact Walter E. Jeske, Soil Conservation Society of America, 838 Fifth Avenue, Des Moines, Iowa.

August 20-23—American Institute of Cooperation, University of Minnesota, Minneapolis Campus. Contact E. Fred Koller, Professor of Agricultural Economics, University of Minnesota, St. Paul, Minnesota.

September 10-13—68th Annual Farm Equipment Institute Convention, Palmer House, Chicago, Illinois. Contact Douglas Hewitt, Executive Secretary, Farm Equipment Institute, 608 South Dearborn Street, Chicago 5, Illinois.

September 10-14—National Association of County Agricultural Agents Annual Meeting, New York City. Contact Vic Carothers, NACAA Publicity Chairman, 328 P. O. Building, St. Joseph, Missouri.

October 29-November 1—28th Annual Meeting of the National Agricultural Chemicals Association, The Homestead, Hot Springs, Virginia. Contact L. S. Hitchner, Executive Secretary, National Agricultural Chemicals Association, Associations Building, Suite 603-604, 1145 Nineteenth Street, N. W., Washington 6, D. C.

November 12-16—Annual Convention of the American Association of Land-Grant Colleges and State Universities, Muehlebach Hotel, Kansas City, Missouri. Contact Russell I. Thackery, Executive Secretary, American Association of Land-Grant Colleges and State Universities, 1785 Massachusetts Avenue, N. W., Washington 6, D. C.

November 13-14—Agricultural Credit Conference, American Bankers Association, Statler-Hilton Hotel, Dallas, Texas.

November 17-23—National Farm-City Week.

December 2-8—National Vocational Agricultural Teachers Association Convention, Kansas City, Missouri. Contact James Wall, Executive Secretary, NVATA, Waverly, Nebraska.

January 18-19, 1962—15th Annual Southern Farm Forum, Roosevelt Hotel, New Orleans, Louisiana. Contact George R. Queen, Secretary, Southern Farm Forum, Chamber of Commerce, 315 Camp Street, P. O. Box 1460, New Orleans 5, Louisiana

C★★★

Your Stake In Foreign Trade

Continued from page 27

it? Mainly this — that we are producing very much more of some products than can be used in this country or sold abroad for dollars.

If we can't export them, they pile up as larger and larger stocks that detract from the strength and vigor of U. S. and world markets. It would seem logical to cut back production to the amounts we can dispose of in normal ways. But that is not easy to do, and it costs a good deal of money if farmers are to be induced to do it voluntarily.

Produce Less—Or, Export More?

Since we have excess capacity, **is it better to export some of our surplus without getting paid for it, or to spend almost as much in an effort to keep from producing it?** That is the dilemma we've been faced with for several years now. We've chosen to sell for foreign currencies (under Public Law 480 and the Mutual Security Act).

This means that the poorer countries get the food but we do not get dollars in return for it. What we get is a balance on the books of banks in the receiving countries. We can and do lend some of this back to them for development projects. Such "money" cannot be used to buy things from outside. That requires dollars, or other hard currencies. It can only be used to procure locally produced supplies and labor, which, of course, could be financed by internal borrowings or taxes that would not cumber up their banking system with large unused balances owned by another country.

Want Countries to Develop

Many of the development programs require sizeable amounts of steel, cement, machinery, fertilizer and so on which must be purchased abroad. Surplus farm products alone cannot do the whole job, even if donated. They may, however, reduce the amount of hard-currency exchange that would otherwise have to be used to buy essential foodstuffs.

But if the poorer countries spend more of their dollars that way, it will slow up development. We want these countries to push their development programs as fast as possible. Only in that way can they raise their standards of living and get into a position where they can buy larger amounts in normal ways.

Exports Didn't Reduce Stocks

Last year (1959-60), we sold nearly a billion dollars worth of surplus farm products for foreign currencies and donated such commodities in the amount of 216 million dollars. This does not include the amounts sold by means of export subsidies under the International Wheat Agreement. To have dumped these large quantities on the domestic or foreign markets would have brought chaos and demoralization. Yet, even so, **we did not export enough to keep stocks from accumulating further and didn't succeed in reducing the huge stocks already on hand.**

What alternatives do we have? We must, of course, continue our efforts to bring U. S. production into better balance with actual, commercial demand. But that is a slow and difficult process, and it's expensive. In the meantime, additional surpluses of the storables are likely to accumulate, unless we continue to move them out in abnormal ways.

Major Developmental Effort

Many have come to feel that it would be better for the United States to join with the other advanced nations in making available these surpluses, together with goods and money contributed by the wealthier nations that do not have agricultural surpluses, in a major world-wide effort to speed up development in the poorer countries.

Many of the poor countries are not yet ready for such a step forward. Others are. Some foods would need to be provided on a straight relief basis, with a view to bringing up to more adequate levels the diets of millions who are chronically undernourished, including many children of school age, many indigent older people, and some of the very low-income employed workers.

No Drain on U. S. Treasury

Contrary to the beliefs of many people, this would not place an added drain on the U. S. Treasury, except

(*Continued on page* 35)

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WHAT ARE MARKETING ORDERS?

President Kennedy, in his message to Congress, asked that marketing orders be used for many more commodities by amending the Marketing Act of 1937. Even before the President mentioned marketing orders in his message to Congress, there had been a flurry of interest in this approach to the farmer's marketing problem. Just what are marketing orders? The following article sheds some light on this question.

● WE HEAR A LOT of discussion about marketing orders for agricultural products, sometimes referred to as prorate, market control, industry self-help marketing programs, and industry trade promotion.

Just what are marketing orders and how do they operate? Are they all the same? What are their strengths and weaknesses? The following 10 points will be helpful in answering these questions.

1. Marketing orders are NOT part of the federal price-support program passed by Congress.

They should not be confused with federal programs which involve subsidy payments, acreage allotments, the soil bank, etc. State or federal marketing orders are available to an agricultural industry because of specific laws which permit the industry to conduct certain marketing programs that involve regulation and assessment and are legally binding on all growers and handlers concerned.

The basis for compulsory regulation and assessment is the favorable vote of the growers and handlers affected. Federal marketing orders governing interstate commerce are authorized by the Agricultural Marketing Act of 1937 as amended.

2. All marketing orders are NOT the same.

State and federal laws authorize several types of programs or regulations. Each specific marketing order is proposed and made effective on the basis of one or a combination of the programs authorized. These optional programs and regulations include:

- Programs authorized only under state marketing orders to increase the demand for the commodity through industry advertising and trade promotion.
- Programs to regulate the supply of the commodity marketed, limiting total volume shipped, regulating within-season flow to market, establishing minimum grade, size, quality, and maturity standards, and establishing surplus and diversion programs.
- Other programs which provide for research on industry problems and the control of unfair trade practices.

3. Marketing orders are NOT production control programs.

As noted in item 2, the main objective of the laws is to regulate the marketing and disposition of the commodity produced, not to control directly the amount a farmer may produce.

4. Marketing orders CANNOT directly set the price of a commodity.

Indirectly their operations influence price through the regulation of supplies going to market and on the demand side through industry advertising and trade promotion. (Milk prices are set directly, but separate laws authorize milk marketing orders.)

5. Marketing orders are NOT initiated by government.

Development of a marketing order takes many months. For a state marketing order, the first step is taken by farmers who feel that they need help to get together as individuals or through their associations to discuss marketing problems. If a marketing order seems advisable and enough growers are interested, a proposed order is prepared. Then the State Department of Agriculture calls a public hearing to receive testimony both for and against the order.

Following the hearing, if the Director of Agriculture finds the order both economically feasible and beneficial to producers and handlers, the order is submitted for vote to all producers and handlers involved.

Before the order can become effective, written assent must be given either by at least 65 percent of the producers representing 51 percent of the volume or by at least 51 percent of the producers representing 65 percent of the volume. If handlers are involved in the order, at least 65 percent by number or volume must give written assent.

For a federal marketing order, approval must be given by at least two-thirds of the growers, by number or by volume, voting in a referendum.

6. Effective marketing orders are NOT voluntary programs.

Once a proposed marketing order has been favorably voted on by the industry and the Director of Agriculture has made it effective, all regulations and assessments issued are binding on all persons covered by the order. Violators are subject to penalties prescribed by law.

7. The government does NOT originate specific regulations under a marketing order.

In both state and federal marketing orders, the Director of Agriculture has the responsibility of seeing that the order operates within the framework of the law, but the specific regulations are initiated by the industry.

An advisory board composed of growers, and in many cases handlers, studies the industry problem and makes specific recommendations of regulation or assessment authorized by the order to the Director of Agriculture, who either approves or disapproves these recommendations.

8. Marketing orders are NOT financed by government.

Under state orders all industry trade promotions and other programs are financed by industry assessment. Federal marketing orders are also self-financed.

9. It is NOT true that marketing orders cannot be terminated.

The most immediate method to suspend the regulations of a marketing order is for the advisory board not to recommend regulations to the Director of Agriculture. The marketing order then becomes inoperative.

Marketing orders may also be formally terminated by action of the Director of Agriculture for a state order or the Secretary of Agriculture for a federal order or by the industry concerned.

10. Marketing orders are NOT a cure-all for marketing problems.

They are simply a device or tool available to help industry in the solution of marketing problems.

Experience with marketing orders during the last 25 years indicates both benefits to growers from soundly planned and well operated orders and failures of orders unwisely conceived and operated. *—Robert C. Rock, Extension Economist, Marketing, University of Calif.*

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To Own or Hire Machinery

Continued from page 9

vast farms. A quarter century ago they began to find out it did not pay to own the massive numbers of trailers it required to haul the crops from the fields to the plants, the tractors to pull the trailers through the fields, or the trucks to pull them to town.

10 Kinds of Trailers

In those first years Rapid Harvest Co. was a small leasing firm with a few trailers, all one kind. Today there are many hundred, and 10 different kinds designed to meet the demand of the progressive change in growing, harvesting and processing techniques. Their service extends out from the Salinas Valley to many points in Southern California and Arizona where row crops are grown.

The major problems fall on the leasing firm. The initial investment is heavy. Equipment must always be ready in the proper quantity. The expensive problem is maintenance.

"As a general rule farmers are reasonably careful with our equipment," says Paul Heple of Rapid Harvest, "but even so, each unit goes through our shop at least once a year, and a good portion more than once. Costs of service and parts keep going up; it becomes more difficult to maintain a stable servicing crew, accentuating the maintenance problem."

Special Crop Equipment

Harry MacKenzie, harvesting superintendent for Bruce Church, Inc., Salinas growers and shippers, explains that one crop they grow is cauliflower, harvested during a two month period. It requires 12 trailers, two tractors and three trucks. They lease the trailers and trucks at a rate of 6 cents a packout carton of cauliflower. The type trailers used could not be used on other row crops.

Some crops, mainly celery, broccoli, and cauliflower, are harvested into big wooden bins — or baskets as the industry calls them — that set on the trailer and are lifted off in one complete load at the shipping plant. These are rented at $1 each per month. Tractors are leased at $4 an hour when needed.

Irrigation is needed for three primary purposes in the valley; first, to get even germination; second, to leach the salts back from the ground surface; and third, to make the plants grow after they have been sprouted. The first two are the primary uses to which irrigation sprinkler systems are put. The general rule is to irrigate by ditch during growing stages.

Limited Use Helps Rental

"Needing sprinkler irrigation only during the first part of our season," says Eddie Pizoni, "really makes the purchase of pipe lines, sprinklers, and booster pumps a very expensive thing. I have 500 acres of tomatoes, sugar beets, lettuce, onions, celery and broccoli. It would cost me $10,000 for the sprinkler system if I purchased it. I rent it a short period for between $300 and $350 a month. That way our money is not tied up all year in equipment we use only a short time."

Ray Johnson of Salinas, who double crops on 275 of his 450 acres, leases 3600 feet of laterals and 600 feet of main line plus booster pumps. He uses it primarily for germinating his crops. Such equipment would cost him a minimum of $9000. He rents it for a month or two, then it goes back to the leasing company.

Rent Until You Buy

"I can lease this equipment for three years," he says, "then I can buy it. Rain For Rent Inc. of Salinas, has a very fine system where at the end of that period half of the original rental fee is deducted from the pipe cost when new, and I can buy it as second hand equipment. So that is what a lot of we farmers are doing. It has a number of advantages."

So well does the leasing of irrigation equipment work out that Rain For Rent, a firm that originated in Bakersfield in the San Joaquin Valley during 1949, also leases in the Santa

Paula, Fresno, Riverside and Bakersfield vegetable growing areas.

"We keep a large supply of pipe ranging every inch from 2 up to 10 inches, with proper couplings, and pumping equipment," says Eldon Kizzias, Salinas Valley manager. "We always give the farmer what he wants immediately, for we can draw on any of the several plants if we are short."

Services offered to the rancher includes engineers to survey his fields and help him install the right kind of a system; a delivery system that takes the equipment to the farmer, (but he must return it himself); service to keep pipe in good condition during the season at no cost to the farmer; a maintenance shop that checks and repairs if necessary every piece of pipe and connection as each is returned.

The Farmers Mercantile Company in Salinas has an entirely different type of rental service. At this big farm machinery and supply store a farmer can rent a disk, rotary chopper, tractor, chisles, post hole auger, electric drill, power unit, lighting set, power saw, and a variety of other farm equipment.

This service is designed to allow the farmer who wants a piece of equipment for a specific job for a short time, to have the unit without buying it.

Some Farmers Object

According to Robert Johnson, general manager of the firm, this type of rental has a number of problems. Some customers object to straight rental basis when weather is bad and they are unable to use the equipment; to paying for labor for hauling equipment back and forth; to paying rental in advance.

"The biggest headache of all," says rental manager Joe Harness, "is putting the machinery into good condition after rental."

This firm rents only used machinery. "We are in this business to make money," Johnson says. "We use the rentals to give us rental profits and on a certain machine a part of the rental may be applied against our investment in the machine which lets us reduce the selling price to move it more easily. In some cases a rental turns out to be a trade demonstration and then we allow anywhere from 60 to 100 per cent of the rental on the selling price depending on circumstances."

They use Associated Equipment Distributors Rental Booklet to arrive at rental prices. Rental for a 10 hour day is 1 percent of the new delivery price of a unit of equipment including freight tax etc; 5 percent a week; 15 percent a month; 25 percent two months; 33⅓ per cent three months.

But even considering unsatisfactory aspects, Farmers Mercantile Co. is finding it advisable to expand their rental service. "It is ideal for building up goodwill for new customers," Johnson says, "and it gives us a reputation for helping people out. Really about the only trouble a customer has in renting is the putting out of the cash for the service, and perhaps occasionally having something go wrong with a piece of equipment and our service department takes care of that at once."

Rental of large, expensive machinery which requires full use to attain low overhead costs will be on the increase during the future feels Arthur Shultis, University of California.

Foreign Trade

(Continued from page 31)

possibly for some outlays for transportation that very possibly would be offset by a reduction in storage costs which now amount to more than a million dollars a day. The Treasury outlay was made when the farmers were paid for the products. Unless something of value can be obtained for them, the U. S. Treasury is out that amount of money. The foreign currency accounts certainly do not help to balance the U. S. budget now and are of dubious value as future assets.

We would almost certainly be better off, in terms of world reaction, to make this generous contribution to world development frankly and openly rather than to accept for it illusory assets that rob it of the appearance of a gift while not actually returning to us assets that are of much value. Such a policy need not, of course, preclude part payment by the recipient countries in forms that will not hamper their development. The construction of embassy buildings, military housing and similar contributions are cases in point, but these can account for only a small part of the total.

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ECHOES

letters from our readers

FUR RUBBED THE WRONG WAY

I read the comments made by Mr. Kennedy of Peavey Mills that you published in your May (Echoes), and to say the least, he certainly rubbed the fur the wrong way . . .

I couldn't help but notice that he did not offer to tell the public who does set the prices. It may be his company falls into the guilty line . . .

We find Better Farming Methods very interesting and of great help in many ways.—*Mrs. Verne Kingsbury, Route 1, Faribault, Minnesota.*

LET MARKET SET PRODUCTION

. . . I was particularly interested to note the article in the April issue about the Western Farmer's Association in which contracts are used 100%. I would hope that the contracts do serve to keep members from cutting each others throats and confine production to actual market needs.

It seems to me we know the kind of production-marketing pattern we want and contracting also serves as the control element. I think, however, even members of this cooperative are not happy when their prices reach disaster levels because of surpluses created elsewhere which lower all prices. Many other cooperatives have a long way to go before they even adopt the way of doing business which WFA has evolved. You state in your editorial that farmers in WFA like the guaranteed market rather than one which tells them how much to produce. It would seem that this market *is* telling them through the contract how much it will take and I think this is as it should be.

As to your inference that all farmers have the opportunity to create their own marketing organizations, I think this is not true or necessarily desirable for this is a little like suggesting that labor should take over private industry. Cooperatives constitute a fraction—a fairly substantial fraction—of our marketing system but they do not dominate same. Many private concerns are doing just as good a job and what we need to do is inject the contractual arrangement into all outlets. The type of legislation I would consider has precedent in California market orders for milk under which market agreements are common to all markets for milk and the market agreements or contracts contain quotas or specific volumes. Otherwise too many producers would be greedy and flood markets and this is exactly the problem we are trying to solve.

Let's figure a man deserving of fair return for an average work load and not that ambition on the part of some can shoulder aside those who do not want extremely large units and lots of hired help. I think you should not ridicule a legislative program if a sound one can be devised and the whole point is to be sure efforts in this direction do not follow past poor precedents. The greatest fault of unsuccessful programs has been in government becoming a market and we want consumers for a market, not government storage warehouses.—*Elliot V. Schubert, Pleasant Valley, Methuen, Massachusetts.*

LESS RECLAMATION NEEDED

I have just finished reading the May issue . . . Each issue is looked forward to and I wish to thank you for having my name on your mailing list. It is most inspiring to read these fine articles and compare notes with your own thinking which helps one make more broad-minded decisions.

I read with interest your article on the conservation reserve. It seems to me that the departments of agriculture and reclamation could very easily solve a great deal of the farm problem if they would use a little more coordination and stop spending so much of our tax money to build large dams and irrigate large areas of arid regions to produce more farm crops and add to our surplus problem. No doubt we need some reclamation to compensate for the vast farm areas being turned into cities but let's be more realistic about it.—*E. Wallace Thorson, Mead, Nebraska.*

YOUR IDEAS

This page is reserved each month so each reader of Better Farming Methods may "sound off" on any farm subject he desires. You may have some comment on the things you read in this issue. If so, send your ideas to us. We'll share them with other "thought leaders" of agriculture who are regular readers of Better Farming Methods.

FINANCE FOR YOUNG FARMERS

I read with much interest your article in the April issue of Better Farming Methods, "Big Question for Young Men: Who Can Own a Farm?" I think that the author has done a good job in setting up the problems facing many young people who wish to become established in farming.

The Farmers Home Administration has helped many young people become owners of their farms. It is a little surprising to me that this was not mentioned in the article. In New Jersey, for instance, we feel that we have had a rather successful record in helping the young man start farming on his own. This is especially true in Sussex county, New Jersey, where a good share of the young farmers who have started within the last eight to ten years have done so with a loan from the Farmers Home Administration.

I believe that the terms that this agency can give a young farmer probably come closer to meeting his needs than many others and, certainly, when a young man is starting to farm the terms over which his debts must be repaid is one of the most serious problems he must face.—*Chester J. Tyson, Jr., State Director, Farmers Home Administration, 220 Post Office Building, Trenton 7, New Jersey.*

NO BOOKLETS RECEIVED

We receive your magazine and like it very much.

Several times I have sent in the special information cards and never did receive any of the booklets that were supposed to be sent out.—*John R. Switzer, Farm Manager, Lafayette Loan and Trust Company, Lafayette, Indiana.*

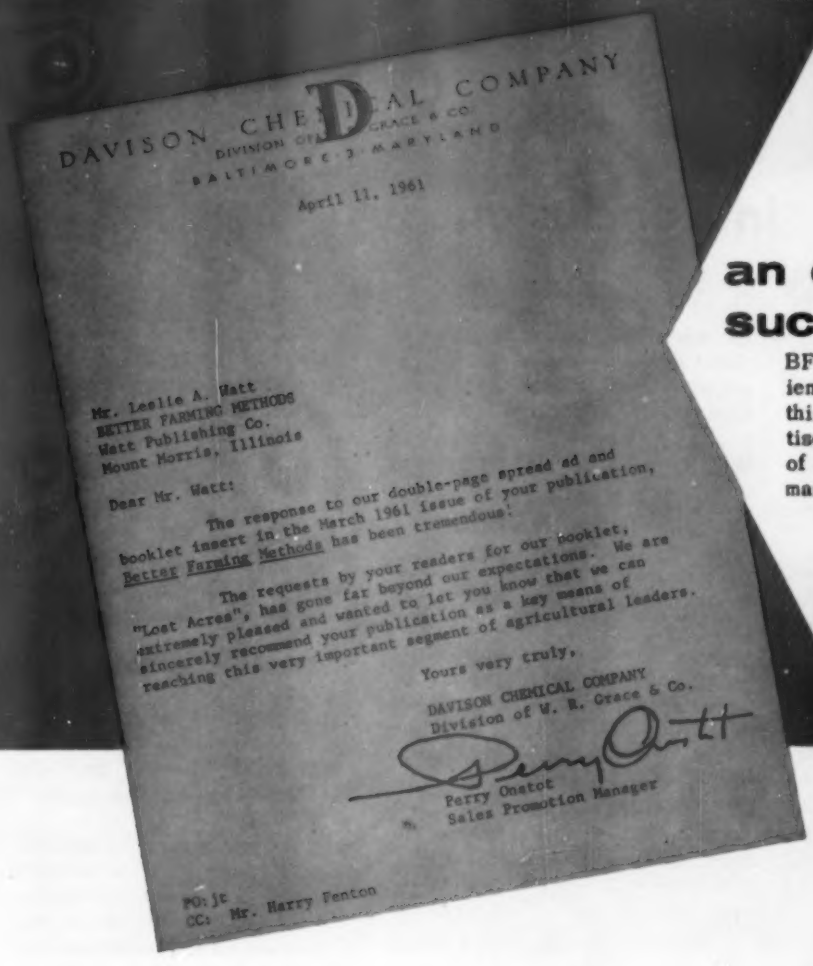
We told Mr. Switzer that his last sentence surprised us, for the listed companies have always been pleased to send out requested information. On rare occasions, the supply of some booklets does run short.—Editor

GIVES THE BEST AND MOST

Your magazine gives the best, and the most information, on all problems affecting agriculture, of any magazine or public publication I have ever had the pleasure of reading.—*Raymond Panketat, Route 2, Mascoutah, Illinois.*

an accomplished aim . . .

Almost one year ago, BETTER FARMING METHODS introduced a new concept in agricultural publishing — exploring the "why" of today's farm problems. Its enthusiastic acceptance by farmers, ag leaders, educators and public officials confirms its unique position among farm magazines.



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EDITORIAL

by Frank Waddle

In Conclusion . . .

It was a little less than four years ago that I nervously approached the task of filling this space each month. Now, as you will read elsewhere in this issue, I have resigned from the staff of Better Farming Methods to accept a new challenge in the field of public relations.

The intervening months since I first came to BFM have offered us a chance to visit on many subjects. I've been taken to task on occasion by an irate reader . . . and others have tossed a few bouquets. But the intent of the letters from you mattered little — the important thing is that you wrote to express your opinion. Until you have been an editor you can never know how much this has meant to me. Special thanks to all of you who have taken a few minutes of your busy day to "write to the editor" of BFM.

During the past four years I have come to know many of you personally. Others are acquaintances by mail, a written speech, a phone call, or through a mutual friend.

Brief Character Sketch

Now, without getting too mushy, I must get on with the job of writing my final item for this editorial page in Better Farming Methods. Beginning next month, the new editor, John Hough, will take over this space. So, let me give you a brief character sketch of "Jack".

Presently editor of Turkey World, the nation's leading magazine for the turkey industry, Hough has an excellent background for taking over the editorship of BFM. He has a Master's degree in Agricultural Economics from Cornell University and has served as extension poultry specialist in Massachusetts and as superintendent of the research farm and field man for Wirthmore Feeds.

Will Need Your Help

As editor of Turkey World since 1958, Hough has been serving a segment of agriculture which has undergone as many of the "adjustments" we have been describing in BFM as any other segment of agriculture. He has a deep and abiding interest in farm policy, ag adjustment, and the many other problems that BFM will deal with in future issues. What's more, his enthusiasm and vigor will be translated into the pages of BFM in a way that should become apparent to you in the coming months.

I know that you will continue to encourage the new BFM editor in the same splendid manner that I have appreciated since July 1957. He is indeed fortunate to have readers such as you behind him as he tackles this new assignment. I'm sure he will be elated, as I have been, with your letters offering criticism, encouragement, or suggestions.

"Now I am going to be over at my uncle's place for a week. If anything comes up that you need my help on, here's where you can reach me . . . "

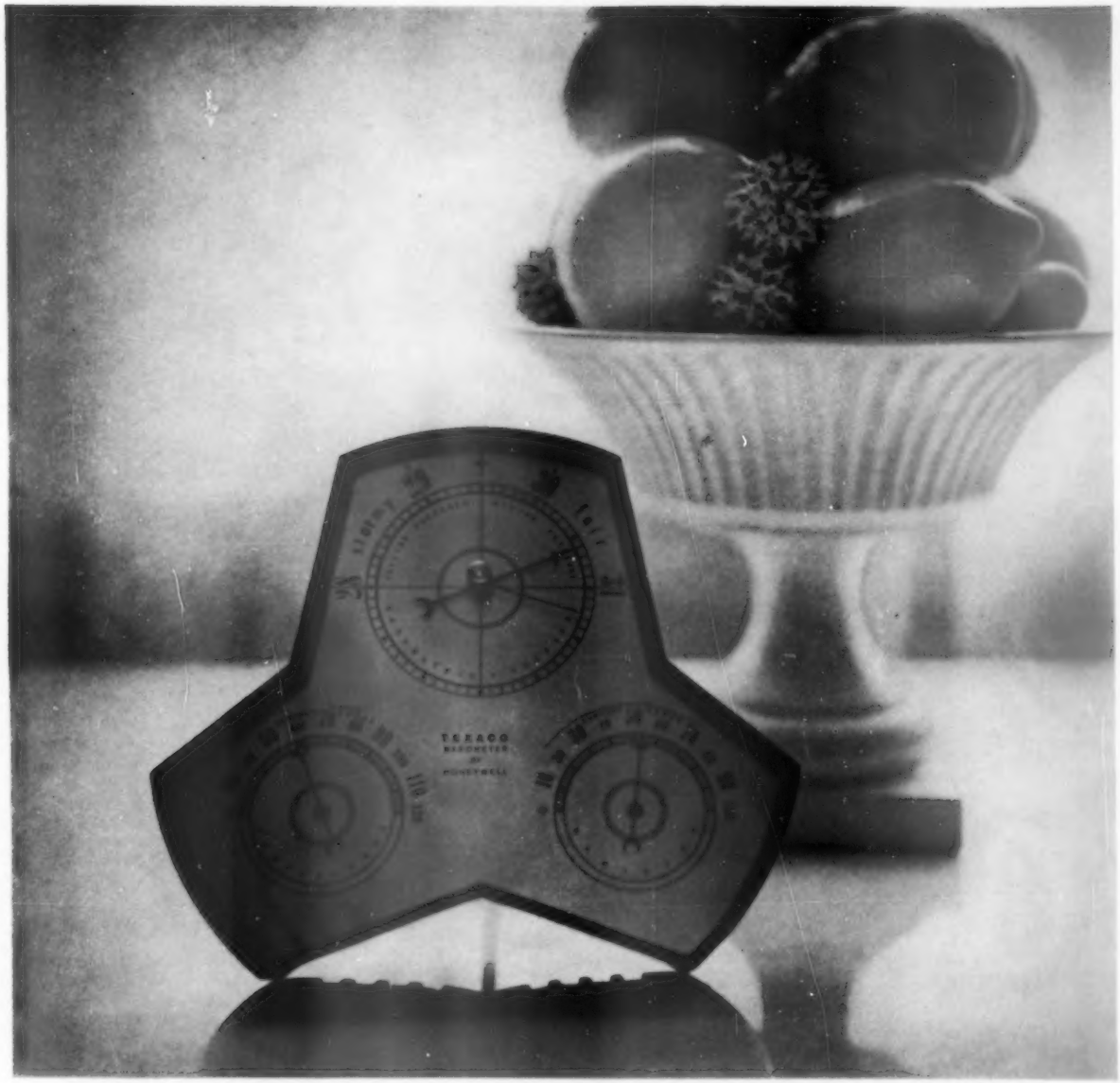
Now, to get personal for a moment, I'd like to say that I am more strongly convinced than ever that Better Farming Methods serves a real need in agricultural journalism and that it can become a great force on the agricultural scene.

Turning now to BFM, let me restate the objectives of the magazine as they were outlined in the July 1960 issue:

"The special group of readers who get BFM require a special editorial concept. Production information is not enough to satisfy their curiosity. Thus, the basic editorial concept of Better Farming Methods is to help our readers understand the forces behind an ever-changing agricultural economy and to help them understand the adjustments inherent in the adoption of new technology. In other words, the BFM editorial concept evolves from the economic and sociological implications of the agricultural revolution."

Of course, it's not easy to leave with such strong convictions about the future of BFM. But what I considered to be a greater opportunity from a personal standpoint came along, and I accepted it. It's as simple as that.

And finally, may I again thank each of you for your loyal support and ask that you be as nice to the new editor as you have been to me.



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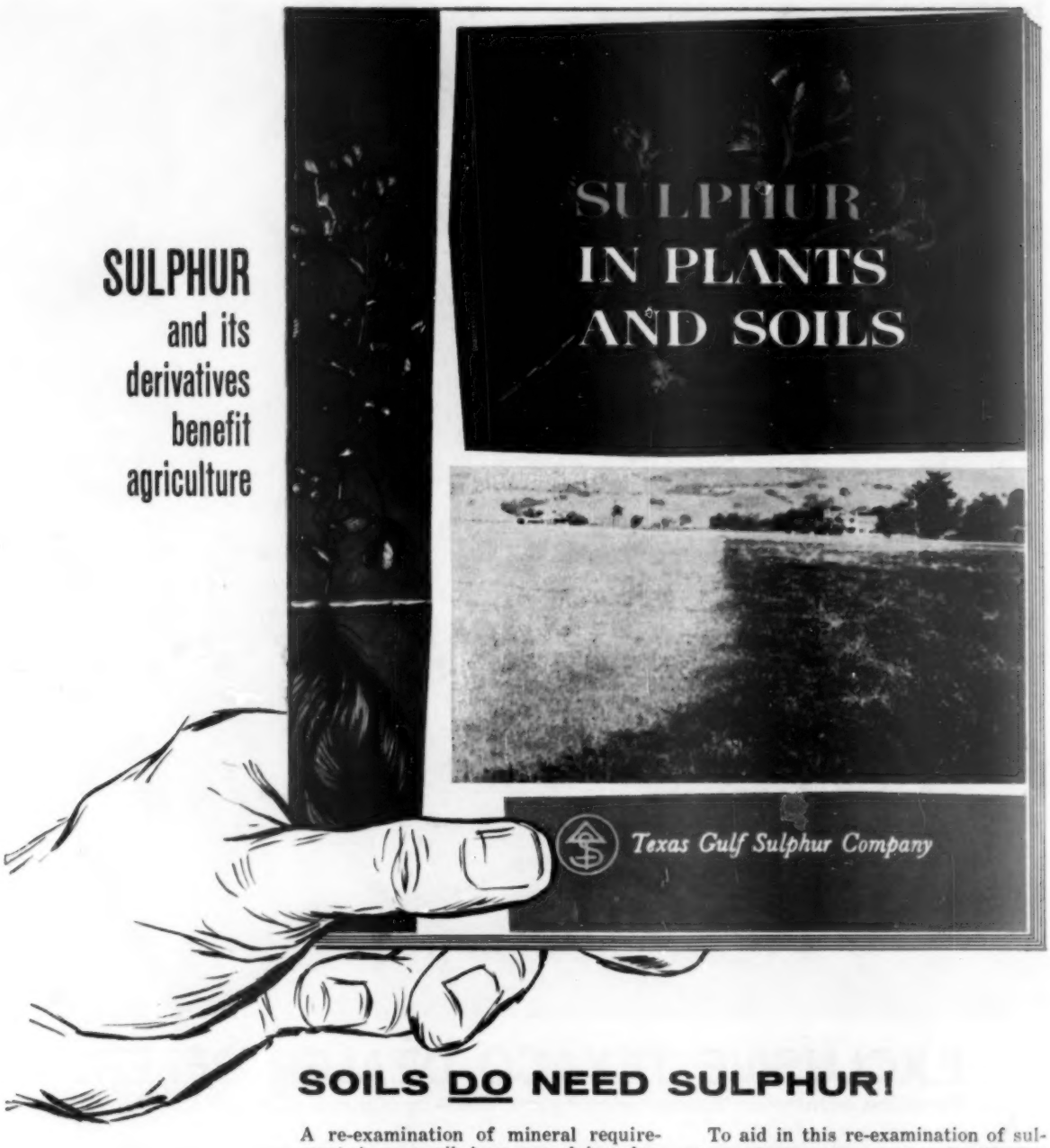


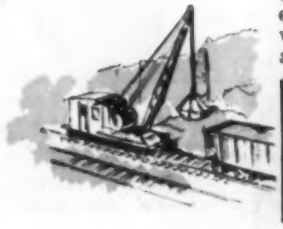
SOILS DO NEED SULPHUR!

A re-examination of mineral requirements in crop-soils is very much in order.

In the wide and successful search for providing better soil foods based on the important triumvirate 0-0-0, there appears to be somewhat of a let down in studies of other soil minerals—the need for sulphur, for example. Tests indicate that there is a danger—even actual existence – of a sulphur deficiency in soils where certain crops requiring sulphur are grown.

To aid in this re-examination of sulphur values, we have prepared a 28 page booklet titled "Sulphur in Plants and Soils" which is edited by a well known authority on this subject. Write for copies not only for yourself but for others you feel would be interested.

This brochure is Section V of our extensive Sulphur Manual discussing many phases of Sulphur. Section VI — Sulphur in Plant Diseases — will be available shortly.



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